

# Department of Energy

Washington, DC 20585

February 28, 2003

MEMORANDUM FOR JACK CRAIG

DEPUTY MANAGER QHIO FIELD OFFICE

FROM:

JESSIE HILL ROBERSON

ASSISTANT SECRETARY FOR

ENVIRONMENTAL MANAGEMENT

SUBJECT:

Approval of Request for Exemption from the

10 CFR 830.207(a) for the TRU Waste Railcar Loading

at Mound.

Reference:

Memorandum from Jack Craig to Jessie Hill Roberson, "Request

for Approval of TRU Waste Railcar Loading Exemption," dated

February 7, 2003.

The purpose of this memorandum is to approve the subject exemption.

According to Title 10 of the Code of Federal Regulations (CFR), Part 830,

Subpart B, "Safety Basis Requirements," a contractor must submit for Department of Energy (DOE) approval a safety basis that meets the requirements of Subpart B by April 10, 2003. CH2MHILL requests approval to operate the TRU Waste Railcar Loading under the current, DOE-approved, non-compliant safety basis until the end of the project on November 30, 2003. The purpose of this request is to allow CH2MHILL to use all resources for closing this project on schedule, and by this, to eliminate the risk.

A technical review of the materials submitted with this exemption request and of the current safety basis for the TRU Waste Railcar Loading has been completed. Based on this review, I find the request for approval of an exemption from the 10 CFR 830 submittal date for compliant safety basis for this facility to be justified, and I approve the CH2MHILL request. The reference, this approval memorandum and its attachments (technical review and exempt decision) are immediately part of the facility authorization basis.

I expect that DOE Ohio and the Miamisburg Closure Project will closely oversee the contractor during the last months of this project to ensure continuous protection of the workers, public, and environment.

## Attachments

cc Paul Golan, EM-3 Sandra Johnson, EM-5 Mark Frei, EM-30 Stephen Sohinki, EH-10 Richard Black, EH-53 Docketing Clerk, EH-10

#### TECHNICAL REVIEW

## CH2MHILL Exemption Request for Title 10 of the Code of Federal Regulation 830 (10 CFR 830)

CH2M HILL Mound, Inc. (CH2MHILL) requests exemption from the 10 CFR 830.207(a) submittal date of April 10, 2003, for a 10 CFR 830, Subpart B compliant safety basis for the TRU Waste Railcar Loading. CH2MHILL requests approval to operate the TRU Waste Railcar Loading under the current, Department of Energy (DOE) approved, non-compliant safety basis until the end of the project on November 30, 2003, without transmitting to DOE the 10 CFR, Subpart B compliant safety basis. The purpose of this request is to allow CH2HMILL to focus on the project closure, and by this, to eliminate the risk.

#### Discussion

## Background

The TRU Waste Railcar Loading project at Mound involves container preparation for shipment, loading TRU waste drums and boxes into tracks, transporting them to the railcar, unloading the containers from the tracks, and loading them into the railcar. The railcars will transport the TRU waste to Savannah River.

The TRU waste railcar loading project started in 2001. During the first three shipments that took place in September 2001, September 2002, and December 2002, over 60 percent of the initial legacy TRU waste inventory at Mound was removed without any incident. In the fourth and fifth shipment planned for February and March 2003, an additional 30 percent of the TRU waste will be removed. The removal of the rest 10 percent legacy TRU waste is planned to be done by the end of May 2003. One shipment, to be conducted by November 30, 2003, is reserved as contingency for newly generated or newly discovered TRU waste.

DOE-Ohio approved the existing safety basis for this project on August 13, 2001. This safety basis is a safety analysis conducted for a hazard category three nuclear facility. It provides the activity description, hazard categorization, and hazard/accident analysis, with a brief description of the safety-related systems and controls. It includes the administrative controls related to radioactive material

limits, work plans and procedures, and limiting handling for the worst-case containers (highest content of radioactive material). This safety bases references the safety bases of the facilities that have the TRU waste stored. As the project is approaching completion, the only building with remaining TRU waste is Buildling T. The T building BIO provides the controls for containers storage, handling and movement, limitation on ignition sources and transient combustibles, emergency response, and other safety management programs.

### Request

10 CFR 830.207(a) requires submittal of a rule-compliant safety basis by April 10, 2003. CH2MHILL requests relief from this provision until the end of the project. The project will end on November 30, 2003, almost eight months after the April 10, 2003, due date. Additionally, the great majority of the remaining work in this project will be completed in less than two months after April 10, 2003.

### Analysis

10 CFR 820, Procedural Rules for DOE Nuclear Activities, contains criteria for granting an exemption to a DOE Nuclear Safety Requirement. The exemptions are:

- (a) would be authorized by law;
- (b) would not present an undue risk to public health and safety, the environment, or facility workers;
- (c) would be consistent with the safe operation of a DOE nuclear facility;
- (d) involves special circumstances, including at least one of the following:
  - Application of the requirement in the particular circumstances conflicts with other requirements;
  - (2) Application of the requirement in the particular circumstances would not serve or is not necessary to achieve its underlying purpose, or would result in resource impacts that are not justified by the safety improvements;
  - (3) Application of the requirement would result in a situation significantly different from that contemplated when the requirement was adopted, or that is significantly different from that encountered by others similarly situated;
  - (4) The exemption would result in benefit to human health and safety that compensates for any detriment that may result from the grant of the exemption;

- (5) Circumstances exist that would justify temporary relief from application of the requirement while taking good faith action to achieve compliance;
- (6) There is present any other material circumstance not considered when the requirement was adopted for which it would be in the public interest to grant an exemption.

#### These criteria are assessed as follows:

- (a) The proposal of an exemption such as this is consistent with the intent of 10 CFR 830 and lawful. The preamble to the final 10 CFR 830 rule specifically states that exemptions can be requested under the provisions of Subpart E of 10 CFR 820.
- (b) The TRU Waste Railcar Loading is currently operating under a DOE-approved safety basis. This safety basis is supplemented by the safety bases of the facility hosting the legacy TRU waste. Combined, these safety bases provide adequate controls to protect the public, environment, and workers. These controls are implemented. More importantly, the project is fast approaching completion, with less than 10 percent of the initial TRU radioactive material to be shipped out after April 10, 2003. Therefore, granting this exemption and allowing CH2HMILL to operate under the current safety basis until the project ends does not present an undue risk to public health and safety, the environment, or workers.
- (c) The TRU Waste Railcar Loading activity will continue to be covered by its current safety basis as required by 10 CFR 830.207(b). Any proposed changes to the safety basis will be evaluated under the Unreviewed Safety Questions (USQ) process. The CH2HMILL rule-compliant USQ procedure was approved by DOE-Ohio in October 2001. Therefore, granting this exemption is consistent with a safe conduct of this activity.
- (d) The situation as described in the CH2HMILL exemption request meets two special circumstances. Application of 10 CFR 830.207(a) results in resources impacts that are not justified by the safety improvements. Indeed, because the project has a DOE-approved safety basis, its end is very close (November 30, 2003), and the majority of the TRU waste was or will be shipped out before April 10, 2003, the use of resources needed to generate a 10 CFR 830, Subpart B compliant safety basis is not justified. Additionally, granting this exemption will result in a safety benefit because CH2MHILL will focus all resources on ending the project and by this eliminating the risk.

Therefore, circumstances (d)(2) and (d)(4) exist that justify granting this exemption.

### Field Recommendation

DOE Ohio Field Office and the Miamisburg Closure Project recommend approval of this exemption.

## Office of Environment, Safety and Health (EH) Comments

EH-53 reviewed the exemption request and had only minor comments, and concurred.

### Conclusion

CH2HMILL request meets the criteria of 10 CFR 820, E for granting the needed exemption.

#### EXEMPTION DECISION

Pursuant to Title 10 of the Code of Federal Regulation (CFR), part 820.61 (10 CFR 820.61), the Assistant Secretary for Environmental Management (EM) is authorized to exercise authority on behalf of the Department of Energy (DOE) with respect to requests for exemptions for nuclear safety rules relating to nuclear safety management for EM facilities.

On February 7, 2003, CH2M HILL Mound Inc. (CH2MHILL) filed a request for exemption from the 10 CFR 830.207(a) requirement for the TRU Waste Railcar Loading at Mound. According to 10 CFR 830.207(a), a contractor must submit for DOE approval a safety basis that meets the requirements of 10 CFR 830, Subpart B by April 10, 2003. CH2MHILL requests relief from this provision and approval to operate under its existing, DOE-approved, non-compliant safety basis until the end of the project, on November 30, 2003.

The request states that the exemption is not prohibited by law; will not present an undue risk to the public health and safety, the environment, or workers; and is consistent with the safe operation of a DOE nuclear facility. It further states that circumstances exist that justify relief from application of the above requirement. I concur with these determinations.

Under the terms set forth in 10 CFR 820.61, I am the Secretarial Officer granted review and approval authority for exemption requests made with respect to 10 CFR 830 for CH2MHILL. Based on a review of the supporting documentation, I find the request set forth above has been justified for relief from the requirements of 10 CFR 830.207(a). It is not DOE's intent to require the development of a rule-compliant safety basis by April 10, 2003, if such requirements would result in negative impact on programmatic priorities, would determine the contractor to generate a compliant safety basis that will be in effect only for less than eight additional months or would assume additional cost without an associated benefit derived to worker safety, the public, or the environment.

On the basis of the foregoing, I hereby approve CH2MHILL's request for exemption from the stated section of 10 CFR 830. The referenced, request, approval memorandum and its attachments (technical review and exemption decision) are immediately part of the facility authorization basis.

Date

Jessie Hill Roberson Assistant Secretary for

Environmental Management